AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Currently Amended) A time-series data processing device, comprising:

image-pick up means for ~~image~~ picking up a specific object;

data processing means for generating a data list indicating, in time series, a temporal

transition of a position and a state of said object ~~image~~ picked up by said image-pick up~~ing~~

means, with respect to a time;

animating means for animating said transition of said position and said state of said

object in accordance with said data list; and

display means for displaying at least one of said data list generated by said data

processing means and said image animated by said animating means.

2. (Currently Amended) A time-series data processing device according to claim 1,

wherein said data processing means is configured to display synchronously on said display

means each corresponding image by linking an image of said object, which is ~~image~~ picked up

by said image-pick up means, ~~if necessary,~~ in accordance with said data list generated, when said

display means display said image of said object animated by animating means.

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3. (Original) A time-series data processing device according to claim 2, wherein said

data processing means is configured to perform at least one kind of data analysis, by linking an

image animated by said animating means, in accordance with said data list generated.

4. (Currently Amended) A time-series data processing device according to claim 1,

wherein said specific object ~~includes~~ comprises a tool ~~that is~~ used ~~for~~ by players in a sports game

~~and for a determination of a winner or a loser of said sports game~~.

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5. (Currently Amended) A time-series data processing device according to claim 4,

wherein said sports game is ~~a~~ soccer, and said tool is a soccer ball.

6. (Currently Amended) A time-series data processing device, comprising:

data processing means for generating ~~an~~ image data by ~~image~~ picking up an image of a

sports game, for processing said image data generated in accordance with a predetermined

format, and for storing said processed data ~~processed~~ in said predetermined format;

interface means connected to said data processing means comprising, ~~and having~~ an

instruction entering means ~~capable of~~ for entering a plurality of instructions, said interface means

~~for~~ input~~s~~ting said processed data ~~processed~~ in said predetermined format, ~~that is stored in said~~

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~~data processing means~~ converts ~~for converting~~ said inputted data ~~inputted~~ into a predetermined

form in accordance with an entered instruction, and ~~for outputting~~ outputs said converted data

~~converted,~~ in accordance with said entered instruction ~~entered by said instruction entering mean~~;

and

image displaying means connected to said interface means for ~~inputting said data~~

~~outputted from said interface means and for~~ displaying on a screen said outputted data from said

interface means ~~inputted on a screen~~,

wherein said predetermined form comprises at least one of a chart, a numerical list, an

image and a video.

7. (Original) A time-series data processing device according to claim 6, wherein said

interface means is configured to enable said image displaying means to display a play list or a

graph that is indicative of a desired analytical result in response to a kind of said instruction.

8. (Original) A time-series data processing device according to claim 6, wherein said

instruction entering means comprise:

a main instruction entering level for performing a plurality of different kinds of analyses;

and

a common instruction entering level to be utilized commonly for said plurality of

different kinds of analyses.

9. (Currently Amended) A time-series data processing device according to claim 8,

wherein said common instruction entering level is configured to enter at least one ~~or more~~ related

item~~(s)~~ with respect to a sports game subject to an analysis.

10. (Currently Amended) A time-series data processing device according to claim 8,

wherein said main instruction entering level is configured to select an analysis of data or an

analysis of formation regarding ~~to~~ a sports game subject to an analysis, as one of said plurality of

different kinds of analyses.

11. (Currently Amended) A time-series data processing device according to claim 9,

wherein said related item ~~includes~~ comprises at least one of a player, a team, ~~a~~ weather, a

stadium of a game, a date of a game, a starting time of a game, and a number of spectators of a

game.

12. (Currently Amended) A time-series data processing device according to claim 11,

wherein said interface means ~~include~~ comprises functions of displaying all plays of an opponent

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teams at said sports game as a list in accordance with said play list, and of retrieving a desirable

play seen at said sports game by designating an optional item of said play list.

13. (Currently Amended) A time-series data processing device according to claim 12,

wherein said interface means further ~~include~~ comprises a function of linking one analysis to

other analysis in accordance with said play list.

14. (Original) A time-series data processing device according to claim 7, wherein said

interface means is capable of enabling said display means to display simultaneously an

animation based on said data converted into said predetermined form in accordance with said

play list, and an image of a sports game based on said image data corresponding to said

animation, and of editing a video of said sports game while analyzing data of said sports game.

15. (Currently Amended) A method of processing data in time-series, comprising ~~the~~

~~steps of~~:

imagin~~e picking up~~g a specific object;

generating a data list indicating, in time series, a temporal transition of a position and a

state of said object ~~image picked up~~, with respect to a time;

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animating said transition of said position and said state of said object in accordance with said data list; and

displaying at least one of said generated data list generated and said animated image animated.

16. (Currently Amended) A method of processing data in time-series according to claim 15, further comprising es the step of displaying synchronously each corresponding image by linking an image of said object, which is imaged picked up, if necessary, in accordance with said generated data list generated, when displaying said animated image of said object animated.

17. (Currently Amended) A method of processing data in time-series according to claim 16, further comprisinges the step of performing at least one kind of data analysis, by linking an animated image animated, in accordance with said generated data list generated.

18. (Currently Amended) A method of processing data in time series according to claim 15, wherein said specific object includes comprises a tool that is used for players in a sports game and for a determination of a winner or a loser of said sports game.

19. (Currently Amended) A method of processing data in time-series according to claim

15, wherein said sports game is a-soccer, and said tool is a soccer ball.

20. (Currently Amended) A method of processing data in time-series, comprising the

steps of:

generating an-image data by imaging e picking up-a sports game;

processing said generated image data generated-in accordance with a predetermined

format;

storing said processed data processed-in said predetermined format;

entering a plurality of instructions;

converting said processed data processed in said predetermined format-into a

predetermined form in accordance with said entered instructions entered; and

displaying said converted data converted into said predetermined form,

wherein said predetermined form comprises at least one of a graph, a chart, a diagram, a

list, an image and a video.

21. (Currently Amended) A method of processing data in time-series according to claim

20, further comprisinges the step of displaying a play list or a graph that is indicative of a desired

analytical result in response to a kind of said instruction.

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22. (Currently Amended) A method of processing data in time-series according to claim 21, wherein said step of converting said data processed in said predetermined format into ~~a~~ said predetermined form in accordance with said instruction comprises ~~a step of~~ entering at least one ~~or more~~ related item~~(s)~~ with respect to a sports game subject to an analysis, which is utilized commonly in said plurality of different kinds of analyses by entering a common instruction ~~entering~~.

23. (Currently Amended) A method of processing data in time-series according to claim 22, wherein said related item includes at least one of a player, a team, ~~a~~ weather, a stadium of a game, a date of a game, a starting time of a game, and a number of spectators of a game.

24. (Currently Amended) A method of processing data in time-series according to claim 22, wherein said step of converting said data processed in said predetermined format into ~~a~~ said predetermined form in accordance with said instruction comprises ~~a step of~~ selecting an analysis of data or an analysis of formation regarding ~~to~~ a sports game subject to an analysis by ~~a~~ main instruction entering.

25. (Currently Amended) A method of processing data in time-series according to claim 21, further comprising~~es~~ the steps of:

displaying all plays of an opponent team~~s~~ at said sports game as a list in accordance with said play list; and

retrieving a desirable play seen at said sports game by designating an optional item of said play list.

26. (Currently Amended) A method of processing data in time-series according to claim 25, further comprising~~es~~ the step of linking one analysis to other analysis in accordance with said play list.

27. (Currently Amended) A method of processing data in time-series according to claim 26, further comprising~~es~~ the steps of:

displaying simultaneously an animation based on said data converted into said predetermined form in accordance with said play list, and an image of a sports game based on said image data corresponding to said animation; and

editing a video of said sports game while analyzing data of said sports game.

28. (New) A method of processing data in time-series, comprising:

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imaging a specific object;

generating a data list, said data list comprising position coordinates of said object and

flags indicating a state of said object at a plurality of points in time;

analyzing said data list based on instruction from a user to determine desired output; and

displaying said desired output.

29. (New) The method of processing data in time-series according to claim 28, wherein

said position coordinates of said data list are analyzed to determine speed of said object.

30. (New) The method of processing data in time-series according to claim 29, wherein

said object is at least one of a sports game player and a ball.

31. (New) The method of processing data in time-series according to claim 28, wherein

said object is a player and said state of said object comprises at least one of a play, pass, dribble

and shoot.

32. (New) The method of processing data in time-series according to claim 28, wherein

said object is a team and said state of said object comprises at least one of a team formation and

ball possession.

33. (New) The method of processing data in time-series according to claim 28, wherein

said desired output comprises a numerical list having at least one numerical value for each flag

indicating state of said object.

34. (New) The method of processing data in time-series according to claim 20, wherein

said converted data is displayed at an angle selected by a user.

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35. (New) A time-series data processing device, comprising:

data processing means for generating image data by picking up an image of a sports

game, for processing said generated image data in accordance with a predetermined format, and

for storing said processed data in said predetermined format;

interface means connected to said data processing means comprising, an instruction

entering means for entering a plurality of instructions, said interface means inputs said processed

data in said predetermined format, converts said inputted data into a predetermined form in

accordance with an entered instruction, and outputs said converted data in accordance with said

entered instruction; and

image displaying means connected to said interface means for displaying on a screen said

outputted data from said interface means,

wherein said predetermined form comprises at least one of a chart, a numerical list, an

image and a video,

wherein said instruction entering means comprise:

a main instruction entering level for performing a plurality of different kinds of

analyses; and

a common instruction entering level to be utilized commonly for said plurality of

different kinds of analyses,

wherein said common instruction entering level is configured to enter at least one related

item with respect to a sports game subject to an analysis,

wherein said related item comprises at least one of a player, a team, weather, a stadium of

a game, a date of a game, a starting time of a game, and a number of spectators of a game, and

wherein said interface means comprises functions of displaying all plays of an opponent

teams at said sports game as a list in accordance with said play list, and of retrieving a desirable

play seen at said sports game by designating an optional item of said play list.

36. (New) A time-series data processing device according to claim 35, wherein said

interface means further comprises a function of linking one analysis to other analysis in

accordance with said play list.

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37. (New) A time-series data processing device, comprising:

data processing means for generating image data by picking up an image of a sports

game, for processing said generated image data in accordance with a predetermined format, and

for storing said processed data in said predetermined format;

interface means connected to said data processing means comprising, an instruction

entering means for entering a plurality of instructions, said interface means inputs said processed

data in said predetermined format, converts said inputted data into a predetermined form in

accordance with an entered instruction, and outputs said converted data in accordance with said

entered instruction; and

image displaying means connected to said interface means for displaying on a screen said

outputted data from said interface means,

wherein said predetermined form comprises at least one of a chart, a numerical list, an

image and a video,

wherein said interface means is configured to enable said image displaying means to

display a play list or a graph that is indicative of a desired analytical result in response to a kind

of said instruction, and

wherein said interface means is capable of enabling said display means to display

simultaneously an animation based on said data converted into said predetermined form in

accordance with said play list, and an image of a sports game based on said image data

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corresponding to said animation, and of editing a video of said sports game while analyzing data

of said sports game.

38. (New) A method of processing data in time-series, comprising the steps of.

generating image data by imaging a sports game;

processing said generated image data in accordance with a predetermined format;

storing said processed data in said predetermined format;

entering a plurality of instructions;

converting said processed data into a predetermined form in accordance with said entered

instructions;

displaying said converted data;

displaying a play list or a graph that is indicative of a desired analytical result in response

to a kind of said instruction;

displaying all plays of an opponent teams at said sports game as a list in accordance with

said play list; and

retrieving a desirable play seen at said sports game by designating an optional item of

said play list,

wherein said predetermined form comprises at least one of a graph, a chart, a diagram, a

list, an image and a video.

39. (New) A method of processing data in time-series according to claim 38, further

comprising the step of linking one analysis to other analysis in accordance with said play list.

40. (New) A method of processing data in time-series according to claim 39, further

comprising the steps of:

displaying simultaneously an animation based on said data converted into said

predetermined form in accordance with said play list, and an image of a sports game based on

said image data corresponding to said animation; and

editing a video of said sports game while analyzing data of said sports game.